

## IN CONCLUSION

A series of six cases of syphilis is presented because of the interest created by their all naming a common source of infection. A true understanding of our national venereal disease problem can be easily pictured from this distinct epidemic.

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## GONORRHEA IN PREGNANCY

ITS TREATMENT AND RELATIONSHIP TO  
OPHTHALMIA NEONATORUM

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CONSIDERING its prevalence and far-reaching influence on health and bodily resistance, gonorrhea in the female is of utmost importance; and during pregnancy its importance is far greater, since it affects not only the mother, but also the child. According to J. Johnston Abrahams,<sup>1</sup> 40 per cent of the sterility in women, 50 per cent of all gynecological operations, and 20 per cent of the total blindness of the world are the direct consequences of unsuccessfully treated gonococcal infection. It is important and fitting, therefore, that physicians should acquaint the public with the general and widespread evil effects of gonorrhea. Neisser at one time stated that, with the exception of measles, gonorrhea was the most widespread of all diseases. This may be an exaggeration; nevertheless, the disease is by no means rare.

*Mode of Infection.*—Except in the case of young children, where gonorrhea is transferred indirectly, it is transmitted almost exclusively by sexual intercourse. In rare instances it may be spread by towels, napkins, douche nozzles, or by an infected person. A frequent mode of infection is that of the wife by a husband who has had gonorrhea, but was supposedly cured. The most important characteristic of the gonococcus from the clinical viewpoint is its power of latency. The organism remains living in the human tissues, but is temporarily inactive; that is, the patient has gonorrhea, but presents no symptoms. The disease may remain latent and suddenly light up into active virulence because of local hyperemia—from excessive intercourse, menstruation, childbirth, or ill-advised pelvic operations. The latent germ may be aroused into acute activity in two ways: It may either produce a fresh gonorrheal attack in the individual in whom it has been residing as a latent parasite, or it may be transferred to another individual and, finding there a fresh soil more congenial to its growth, incite an acute process.

Gonorrhea and pregnancy may coexist under three conditions: (1) the gonorrheal infection may antedate the occurrence of impregnation; (2) the gonorrhea may have been acquired during coitus, which also resulted in conception; and (3) the gonorrhea may have been contracted after conception has occurred.

Most cases that one has to deal with belong to Group 1. The infection, having passed the acute

stage, becomes chronic. The two other groups usually present the acute and subacute forms of the disease.

The influence of pregnancy upon a preëxisting gonorrhea is usually quite pronounced. The marked congestion of the tissues, incident to the gravid state, furnishes abundant stimulus for the multiplication of the gonococci, which thus causes an exacerbation of a latent gonorrhea. It seems that pregnancy predisposes to widespread upward extension, occasionally causing endometritis and deciduitis, and even involving the tubes. However, gonorrhea is not such an important causative factor in abortion as formerly supposed. A study of Bernstine and Castallo's<sup>2</sup> statistics, extended over a period of five years and including 3,586 deliveries at Jefferson Maternity Hospital, shows that eighty-four patients had *positive* finding for gonococci during pregnancy and received the following treatment, which was adapted to the stage of infection and was continued until the time of delivery. In acute gonorrhea, rest is most beneficial. After the symptoms gradually subside, a simple cleansing douche and sedative measures are all that is employed. Later a douche, containing one teaspoonful of Lugol's solution to two quarts of warm water, may be used. When the acute symptoms have entirely subsided, the patient is treated more vigorously along the same lines as chronic cases. The treatment of chronic cases is divided into two parts: those measures that the patient uses at home, and those that the physician carries out.

Home treatment consists of daily vaginal douches under low pressure, using one teaspoonful of Lugol's solution to two quarts of boiled water. The office or hospital treatment consists of exposing the cervix with a vaginal speculum. The discharge is carefully wiped away from the cervix. A pledget of cotton, saturated with aqueous solution of metaphen 1:1000, is placed in the cervical canal and left *in situ* for five minutes. The vagina is then swabbed with the metaphen solution; if there is urethral involvement, about fifteen drops of 10 per cent argyrol are instilled into the urethra.

Out of the above-mentioned 3,856 deliveries at Jefferson Maternity Hospital (Philadelphia), eighty-four cases were complicated by gonorrhea and treated for it during the prenatal period in the way outlined above.

The children born of mothers in the treated group were free from gonorrheal ophthalmia. The babies of both groups received exactly the same prophylactic eye treatment when delivered, yet there were fifteen cases of gonorrheal ophthalmia born of mothers who did not receive prenatal treatment (who apparently did not give evidence of gonorrhea, thus escaping treatment which they should have received).

This would show that the prenatal treatment of mothers afflicted with gonorrhea is a more important prophylactic measure against gonorrheal ophthalmia than Crede's prophylactic instillation of silver nitrate in the eyes of the new-born child.

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<sup>1</sup> Abrahams, J. Johnston: *Gonorrhea in Women and Children*.

<sup>2</sup> Bernstine and Castallo: *Medical Record*, p. 97 (Jan. 16), 1935.